

IN THE CLAIMS:

Please cancel Claims 14, 15, and 18 without prejudice to or disclaimer of the subject matter presented therein. Please amend the claims as shown below.

1. (Currently Amended) A ~~substrate of a target substance detection element to be used for a~~ detection apparatus for detecting a target substance in a specimen, utilizing surface plasmon resonance, comprising:

a target substance detection element, including: a base; and a metal structure arranged on a surface of the base in a localized manner; said; and a target substance capturing body fixed on a surface of the metal structure, wherein the metal structure having has a loop section or a crossing section, and the metal structure has a thickness between 10 nm and 100 nm;

means for bringing the element into contact with the specimen; and
detection means for detecting the target substance captured by the element by irradiating the element with light emitted from a light source and observing transmission of the light.

2. (Currently Amended) The ~~substrate~~ apparatus according to claim 1, wherein ~~said~~ the metal structure has a largest length between two edges that is found within a range not smaller than 10 nm and not greater than 1,450 nm.

3. (Currently Amended) The ~~substrate~~ apparatus according to claim 2,

wherein the largest length between two edges is found within a range not smaller than 50 nm and not greater than 450 nm.

4. (Currently Amended) The substrate apparatus according to claim 1, wherein it comprises a plurality of metal structures that are spaced apart from each other.

5. (Currently Amended) The substrate apparatus according to claim 4, wherein any two adjacently located metal structures are separated by a distance that is found within a range not smaller than 50 nm and not greater than 2,000 nm.

6. (Currently Amended) The substrate apparatus according to claim 5, wherein the distance separating any two adjacently located metal structures is found within a range not smaller than 150 nm and not greater than 1,000 nm.

7. (Currently Amended) The substrate apparatus according to claim 1, wherein ~~said~~ the metal structure is made of a metal selected from gold, silver, copper and aluminum or an alloy of any of them.

8. (Currently Amended) The substrate apparatus according to claim 1, wherein ~~said~~ the base is optically transparent.

9. (Currently Amended) A ~~substrate of a target substance detection element~~

to be used for a detection apparatus for detecting a target substance in a specimen, utilizing surface plasmon resonance, comprising:

a target substance detection element, including: a base; and a metal film having an aperture and arranged on a surface of the base; said in a localized manner; and a target substance capturing body fixed on a surface of the metal film, wherein the aperture having has a loop section or a crossing section, and the metal film has a thickness between 10 nm and 100 nm;

means for bringing the element into contact with the specimen; and
detection means for detecting the target substance captured by the element by irradiating the element with light emitted from a light source and observing transmission of the light.

10. (Currently Amended) The ~~substrate~~ apparatus according to claim 9, wherein it comprises a plurality of apertures that are spaced apart from each other.

11. (Currently Amended) The ~~substrate~~ apparatus according to claim 10, wherein any two adjacently located apertures are separated by a distance that is found within a range not smaller than 50 nm and not greater than 2,000 nm.

12. (Currently Amended) The ~~substrate~~ apparatus according to claim 11, wherein the distance separating any two adjacently located apertures is found within a range not smaller than 150 nm and not greater than 1,000 nm.

13. (Currently Amended) The substrate apparatus according to claim 1, wherein said the metal structure comprises an outer frame structure having an aperture and an inner structure arranged in said the aperture and spatially separated from the outer frame structure.

14 and 15. (Cancelled)

16. (Currently Amended) The substrate apparatus according to ~~claim 15~~ claim 1, wherein said the detecting means is an optical detecting means.

17. (Currently Amended) A method of detecting a target substance in a specimen by utilizing surface plasmon resonance, comprising:

a step of bringing a target substance detection element ~~according to claim 14~~ into contact with the specimen, the target substance detection element including: a base; a metal structure arranged on a surface of the base in a localized manner; and a target substance capturing body fixed on a surface of the metal structure, wherein the metal structure has a loop section or a crossing section, and the metal structure has a thickness between 10 nm and 100 nm; and

a step of detecting the target substance captured by the element when the specimen contains the target substance by irradiating the element with light emitted from a light source and observing transmission of the light.

18. (Cancelled)

19. (Currently Amended) The ~~target substance detection element~~ apparatus according to ~~claim 14~~ claim 1, wherein ~~said~~ the target substance capturing body is an antibody.

20. (Currently Amended) The ~~target substance detection element~~ apparatus according to claim 19, wherein ~~said~~ the antibody is an antibody fragment.

21. (Currently Amended) The ~~target substance detection element~~ apparatus according to claim 20, wherein ~~said~~ the antibody fragment is a multi-specific multivalent antibody.